

IMPLICIT ATTITUDES OF INTERNATIONAL AND AMERICAN ADULT STUDENTS TOWARD BLACK AND WHITE TEACHERS

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ABSTRACT: The purpose of this study was to examine hidden prejudice in two groups of adult students, international and American, against black compared to white teachers. Social desirability in the minds of participants may affect the result of a study involving racial bias (Mullins, 1982). For this reason, the researchers created a computer protocol using the standard Implicit Association Test (IAT) to measure the implicit attitudes of participants. The IAT relies on the idea of automatic information process within the mind that is not impacted by social desirability. A clear concern in education is that the racial bias toward minority students will let those implicit biases affect the way they teach those students, creating a self-fulfilling prophecy of poor student performance. But the implicit bias can work both ways and can impact a teacher's effectiveness. Traditional racial prejudice theories usually looked at white's attitudes toward blacks and other groups. This study had a significant directional shift by focusing on the international students' racial attitudes toward black and white teachers. The implicit racial attitudes of international students were also compared to those of American students. The result and evaluation of this study may be a valuable tool to improve student services and teacher professional development in higher education. Suggestions for future research are also provided.

Keywords: Implicit Association Test, teacher preference, international students, racial prejudice

The number of international students enrolled in public and private U.S. colleges and universities in the 2012-2013 academic year was nearly 820,000 (National Center for Education Statistics, 2013). Most of the international students come from non-English speaking countries and many are required to take language courses before they become culturally and linguistically ready for regular college courses. Most also come from societies that are much less racially diverse compared to the U.S. For many recently arrived international students, their prior exposure to American culture primarily came from media outlets in their own countries or internet. Given that international students, especially the newly arrived, usually have not had enough interactions with the different racial groups in the US society, they will likely be guided by stereotypical beliefs about those of these racial and ethnic backgrounds. At the same time, due to language limitations and social desirability, international students might not be comfortable in

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describing their racial attitudes. Thus, indirect assessment of their racial attitudes with limited command of their English language will likely be more suitable. In this study, researchers used the Implicit Association Test (IAT) to determine the implicit racial

preference of international students to the images of black and white teachers. Initially, the researchers sought to find out how international students from different cultural backgrounds and belief systems perceived black compared to white teachers. Subsequently, American students were included in the study to get better perspectives. This study was guided by four research questions:

Question 1. Do international students have built-in stereotypes against black and white instructors?

Question 2. Do American students have built-in stereotypes against black and white instructors?

Question 3. Are the perceptions toward black and white instructors different between international and American students?

Question 4. Is there a gender difference in the implicit attitudes toward white and black teachers?

Theoretical Framework

This study was theoretically based on elements of intergroup contact theory and acculturation theory. Allport (1954) proposed intergroup contact theory and claimed that prejudice between two group members could be reduced through intergroup contact. Acculturation refers to the process of cultural and psychological change that happens as a result of contact between two or more cultures and individuals (Berry, 2005; Gibson, 2001). Over the years, acculturation theories have evolved and become quite complex and confusing (Ngo, 2008). However, numerous research studies have been conducted to examine the process of cultural interaction, its outcome, and acculturation. The focus of early studies were mainly on the adjustments and adaptations to the dominant culture made by immigrants (Ngo, 2008; Van Acker & Vanbeselaere, 2011). The basic supposition of these theories is that people tend to have more prejudice against groups with which they are unfamiliar. Prejudice declines, however, as they become more familiar with these groups through interaction and acculturation. The American public has seen this change on a broad scale as the racial attitudes of white Americans have softened since the civil rights movement of the sixties increased the contact and interaction between different racial groups.

For this study, the researchers also relied on the underlying theory strength of the Implicit Association Test (IAT) (Greenwald, McGhee, & Schwartz, 1998) to actually measure the attitudes and beliefs of participants that they would probably not express openly or even realize they hold, such as their racial prejudice. The IAT systematically predicts real, personal, important, and clinically significant outcomes... especially in the domain of racial prejudice and stereotyping (Greenwald et al., 1998; Greenwald, Poehlman, Uhlmann, & Banaji, 2009; Nosek, Hawkins, & Frazier, 2011). It measures hidden bias of participants from their response reaction time, called latencies in the IAT. The IAT assesses the beliefs of individuals by measuring differences in one's reaction time

towards paired stimulus. Suppose a person is presented with (a) the combination of a picture of a flower and a word beautiful, or (b) the combination of a picture of an insect paired with a word beautiful. If a concept of 'flower is beautiful' is congruent with his/her established beliefs, it will require less time for an individual to recognize that combination. The IAT protocol measures these underlying automatic associations in milliseconds.

Method

This research used a quantitative design to investigate the implicit preference of international and American adult students toward black and white teachers. The study was approved by the Institutional Review Board (IRB) and conducted in 2013 and 2014 at a large urban university in southeastern region in America. In this study, adult referred to an individual whose chronological age was 18 years and older. International students were defined as foreign students who were enrolled in an English language program at the university mentioned earlier. The American students were undergraduate students who were enrolled in the College of Education at the same university.

Sample

The total number of participants was 83 ($N=83$) with 49 international and 34 American students. They were convenient samples of student volunteers. The international students ($N=49$) were attending an English institute affiliated with a large urban public university in the Southeastern region in America. The institute classified their students into five English proficiency levels, level one to five, level five being the most proficient. The participants of this study were level four and above students: 13 females and 36 males. The average age was 22 years, average length of stay in U.S. 2 years, and average length of time learning English before arrival to the U.S. was 2.4 years. The self-rated familiarity with American culture before coming to the U.S. was 2.8 on a Likert type scale (1=Not familiar at all to 5=Very familiar). Most of the participants were from the Middle East (19) and China (11). The remainder were from South Korea (4), India (3), Japan (2), Vietnam (2), Venezuela (2), Kazakhstan (2), and 1 each from Ukraine, Chile, Togo, and Turkey. The international students did not receive any compensation for participating in the study.

The American students ($N=34$) were undergraduates who were enrolled in the College of Education at the same university. They were elementary or secondary education majors with various subject areas. When this study was conducted, the students were taking educational psychology course. The data were collected over two semesters in 2013 and 2014. There were 25 females and nine males. The average age was 23 years. The racial representation of the American students was white (21), Latino (6), African American (3), Asian (2), and biracial (2). Religious affiliation was Christian (18), Buddhist (1), other (3), and none/agnostic (2). The participants received extra credit for volunteering for this study.

Instrumentation

Two instruments were used to collect the data: a demographic survey and the computer-based Implicit Association Test (IAT).

Demographic survey. The demographic survey for the international students was computer-based. An IAT batch file was created and added to the IAT protocol. The survey for international students had ten questions: gender, date of birth, country of origin, religion, arrival date to US, English proficiency level, length of English learning, self-reported familiarity of American culture before arriving at the U.S., and the medium of learning American culture. The demographic survey for the American students was in paper-and-pencil format. The survey for the American students has seven questions: gender, date of birth, program, major, year in college, ethnicity/race, and religion.

The Implicit Association Test (IAT). The computer-based IAT was used to understand the perceptions of international and American students' racial attitudes toward black compared to white teachers. Based on the standard IAT protocol, the researchers created a computer program to access the established stereotypes of students toward black and white teachers. The researchers used picture and text stimuli to detect the associative strength between two targets (black and white teachers) and two attributes (positive and negative attributes). As alluded to earlier, people tend to react faster to stimuli pairs that are congruent with their built-in beliefs. The program recorded the reaction time in milliseconds and the reaction latency was used in data analysis.

The IAT protocol for this study included 16 picture stimuli and 16 text stimuli. The picture stimuli included 16 pictures of eight black instructors (four females and four males), and eight white instructors (four females and four males). The images were carefully screened to balance factors other than race between the two groups. Dress, facial expression, background, and size of image were considered in selecting them. The researchers designated the pictures of eight white teachers as *Target A* and eight black teachers as *Target B*. The text stimuli included 16 descriptors. They were eight pairs of positive and negative attributes that expressed productive and counter-productive teacher behavior conducive to students' learning: attractive/ugly, caring/indifferent, friendly/unfriendly, knowledgeable/ignorant, patient/impatient, prepared/lazy, professional/unprofessional, safe/dangerous. The researchers designated eight positive attributes as *Attribute A* and eight negative attributes as *Attribute B*. The researchers also designated hypothetically compatible pairs: Target A (white teachers) - Attribute A (positive attributes) and Target B (black teachers) - Attribute B (negative attributes).

Procedure

Each participant completed the computerized task on a laptop provided by the researchers in a quiet room. To measure the participants' implicit racial attitudes towards black and white teachers, stimuli that included pictures and texts were programmed to appear on the upper left or upper right of the computer screen for a very brief time. As picture or text stimuli appeared, participants responded by pressing the E key (positioned on the left side

of the keyboard) if the stimulus belonged to the category on the upper left side. Participants responded by pressing I key (positioned on the right side of the keyboard) if the stimulus belonged to the category on the upper right side. This information was included in the verbal task instructions for the IAT given to participants before they started the task. Participants were also instructed to place their index or middle fingers on E and I keys on the computer keyboard when they were ready to begin. The average time to complete the demographic survey and the IAT was about ten minutes.

Data Collection

The demographic survey and IAT was administered in one session. The IAT was administered on a laptop computer with the Windows Operating System to run Inquisit v.3.0 software. Three laptop computers were used to collect data. Three researchers administered the IAT in a quiet place. The data were collected in a 12-month period in 2013-2014. After the participants completed the task, the IAT data were transferred to the primary researcher's password-protected computer immediately. The data on the other computers were deleted. The demographic survey forms were stored in a locked file cabinet.

Data Analysis

The administered IAT test results in *D*-score (Greenwald, et al., 1998). The score describes the direction and magnitude of one's preference. The higher the *D*-score, the stronger the association between the hypothetically compatible pairings (Greenwald, Nosek, & Banaji, 2003). The range of the *D*-score is -2 to +2. In this study, zero indicated no preference for black or white teachers. Positive score indicated that the participants associated Target A (white teachers) with Attribute A (positive attributes) or Target B (black teachers) with Attribute B (negative attributes). Negative score indicated that the participants associated Target A (white teachers) with Attribute B (negative attributes) or Target B (black teachers) with Attribute A (positive attributes). The IAT scoring algorithm shows that the *D*-score of 0.65 (either positive or negative for all the *D*-scores) as indicating a strong preference, between 0.65 and 0.35, a moderate preference, between 0.35 and 0.15, a slight preference, and the score between -0.15 and 0.15, no preference.

Table 1

Descriptive Statistics of IAT D-Score for American and International Students

	American students	International students
<i>n</i>	34	49
<i>M</i>	0.1971	0.3613
<i>SD</i>	0.4793	0.4731
<i>SV</i>	0.2443	0.2238

Note. *SV* = sample variance.

Table 2

Independent t-test of IAT D-Score between American and International Students

Pooled variance	0.2321
Hypothesized mean difference	0
df	81
<i>t</i> -statistic	-1.5268
P(T<= <i>t</i>) one-tail	0.0653
<i>t</i> Critical one-tail	1.6638
P(T<= <i>t</i>) two-tail	0.1306
<i>t</i> Critical two-tail	1.9896

Results

The IAT results suggested that the international students who participated in this study have shown very moderate implicit preference to white teachers compared to their black counterparts ($M=0.36$, $SD=0.47$). This finding suggested that international students might have already formed some concept of racial hierarchy within the US society. American students have shown a slight implicit preference for white teachers ($M=0.20$, $SD=0.48$). The independent *t*-test was conducted to find out if there were any significant statistical differences in the perceptions toward black and white instructors between international and American students. The result revealed significant difference at the .10 level of significance indicating that international students associated black teachers with negative attributes more than American students.

The researchers also conducted independent *t*-tests for international female and male students to examine gender differences. Interestingly, international female students tended to have a weaker bias towards black teachers than male students ($M=-0.22$ for females and $M=0.41$ for males, $t(47)=-1.317$, $p=0.097$) although they were not different in familiarity with the US culture or language proficiency level. The findings indicated that American female students also showed a weaker bias toward black teachers than male American students. The independent *t*-test to compare the implicit preference of all female ($n=38$) and male ($n=45$) students toward black and white instructors were insignificant: $t(81)=-2.36$, $p=0.01$).

Concluding Remarks

Much research has been done to explore the existence and level of racial or cultural prejudice the international students faced in their host country. However, research on the attitudes of international students about various racial groups in their host country is very rare. Earlier studies on racial attitudes are based on the traditional racial prejudice theories that look at white's attitudes toward blacks. Recently, the shift to understand the racial prejudice in multi-racial context has been salient. The racial attitudes of immigrants especially those of Asian and Latino toward blacks and whites have been notable (Kim & Roth, 2013). The value of this study lies in that directional shift from white's attitudes toward other groups to the attitudes of newly arrived group. From a theoretical perspective, this study may contribute to the testing of elements of intergroup theory and acculturation theory. From a practical perspective, the results and evaluation

of this study may be a tool to improve international student services and teacher professional development in higher education. It may also contribute to the progress of implicit cognition and formation of racial prejudice.

The researchers anticipate that the difference of implicit preference toward black and white instructors between international and American students will emerge as significant with larger samples. How and why females formed less bias than males towards an unfamiliar group was rather counter-intuitive. The consistency across students of different cultural and political backgrounds was also intriguing and deserved more extensive research from multiple perspectives.

Do recently arrived international students from countries with few citizens of African descent come to the US with pre-conceived prejudices against African Americans, specifically African American teachers? If that is so, could that be due to their lack of direct interaction or due to their exposure to stereotypical images of race from media in their home countries? To understand the complex nature of racial stereotypes and inner workings of the mind, more interdisciplinary research is needed.

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